

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments (filed 5/06/2011) addressing the 35 U.S.C 103(a) rejection of currently claims 1, 7 have been fully considered but they are not persuasive.

#### Applicant argues:

Applicant respectfully disagrees with the Examiner...The reason for this is that, for example, disregarding a signal because it is intended for another terminal is not the same as disregarding a signal because it does not carry time-sliced elementary streams.

Indeed, in Stanwood all of the portions of the signal are either TDM or TDMA and, as such, could all be considered to be time-sliced; none of the portions are not TDM or TDMA. Thus, Stanwood clearly does not teach or suggest the claimed features of "determining ... [whether or not] the signal carries time-sliced elementary streams" and "disregarding the signal in response to determining that the signal does not carry time-sliced elementary streams."

The afore-mentioned features also are not taught or suggested by Mecklenbrauker. As such, the cited art does not, either individually or in combination, teach or suggest the combination of features of independent Claim 1. For at least this reason, claim 1 is patentable.

Art Unit: 2611

Examiner Response:

Stanwood et al. disclose a downlink map 123 which discloses whether or not TDM streams (corresponding to the claimed time-sliced elementary streams) are present or not.

With respect to treating the TDM signals of Stanwood et al. as time-sliced elementary streams Applicants are reminded that the Examiner is entitled to give the broadest reasonable interpretation to the language of the claim, consistent with the specification. *In re Morris*, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997).

If TDM streams are present, it is disclosed that the DIUCs describe the TDM transition points (column 11, lines 49-65). If TDM portions are not carried, the signal comprises TDMA beams as shown in Fig. 12 (column 12, lines 32-44 see also column 9, lines 55-56 the DIUC's indicate whether or not TDM is used for each PHY-mode, Fig 8 and Fig. 12 show PHY-modes as blocks labeled QAM-x, FEC y).

With respect to the claimed “disregarding the signal in response to determining that the signal does not carry time-sliced elementary streams” Examiner disagrees with Applicant that the aforementioned limitation is not disclosed (or at least suggested) by Stanwood et al. for the following reason: when the signal of Stanwood does not carry time-sliced elementary streams, the frame structure of Fig. 12 is used, and the signal (signal portions) which are not intended for a particular terminal are neglected (column 11, lines 32-39, column 12, lines 44-59). The disregarding of the signal is *indirectly in response* to determining that the signal does not carry time-sliced elementary streams.

Art Unit: 2611

According to the MPEP 2106 [R-6] II C. "USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023,1027-28 (Fed. Cir. 1997). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320,1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.")

Claims 1, 7 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Stanwood et al. (U.S. 7,197,022) in view of Mecklenbraucker (U.S. 7,106,705).

2. Applicant's arguments (filed 5/06/2011) with respect to the 35 U.S.C. 103(a) rejection of claims 13 and 17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Specification***

3. The revised abstract received on 5/06/2011 is acceptable and has been entered.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7, 13, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanwood et al. (U.S. 7,197,022) in view of Mecklenbraucker (U.S. 7,106,705).

With respect to claim 1, Stanwood et al. disclose: decoding in a receiver transmission parameter information signaling data from a signal (Fig. 8, structure of downlink subframe 124 transmitted from a base station to one or more terminals and Fig. 9 exemplary downlink map structure, see column 10, lines 27-47 and column 1, lines 29-33. Column 11, lines 31-67 through lines 1-2 of column 12 disclose that the DIUC entries of the downlink map 123 indicate the downlink PHY mode (modulation and FEC). Therefore at a terminal the DIUC is decoded to the appropriate downlink modulation and FEC.) the signal including the transmission parameter signaling data on a level different than a level on which service information is included (Fig. 8, signal 125 which includes "DL MAP" is part of frame control header 125 whereas downlink data (the downlink data corresponds to the claimed service information) is part of data portion 121. Column 9, lines 26-27, column 10, lines 48-64); determining from the decoded transmission parameter signaling data if the signal carries time-sliced elementary streams (column 11, lines 59-65 where the DIUC described the beginning of TDM portions and subsequent transitions of the TDM portion 122 (corresponds to the

Art Unit: 2611

claimed time-sliced elementary streams. In column 11, lines 53-56 it is disclosed that the DIUC discloses whether TDM or not are used); and determining from the decoded transmission parameter signaling data whether the signal has a forward error correction framing structure (TDM and TDMA sections have associated FEC x (Fig. 8 and Fig. 12)) and disregarding the signal in response to determining that the signal does not carry time-sliced elementary streams (Fig.12 case when TDMA is used for all the downlink data 121 (compared to Fig. 8 frame which includes TDM and TDMA portions). Column 12, lines 32-59. Lines 53-56 disclose that each terminal receives information on when their preamble 106 would be transmitted and therefore disregards the portion of the signal that is not assigned to it. Refer also to column 11, lines 32-39, column 12, lines 44-59. The disregarding of the signal is *indirectly in response* to determining that the signal does not carry time-sliced elementary streams).

Stanwood et al. do not expressly disclose: the transmission parameter signaling data on a lower level than a level on which service information is included.

In the field of implementing transmission protocol, Mecklenbraucker et al. disclose: the transmission parameter signaling data on a lower level than a level on which service information (interpreted to correspond to data) is included (Fig. 2, column 4, lines 51-61 Layer 1 which includes descriptions of the bit transmissions (is a transmission parameter signaling layer) and Layer 2 is the data link layer).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system of Stanwood et al. based on Mecklenbraucker et al.

Art Unit: 2611

to use a layer model commonly used and suitable for radio communications (Mecklenbraucker et al. , column 4, lines 51-61).

Claim 7 is rejected based on a rationale similar to the one used to reject claim 1 above.

With respect to claim 13, Stanwood et al. disclose: creating transmission parameter signaling data including two information bits to signal whether a signal carriers time-sliced elementary streams (column 11, lines 49-65. 4-bit DIUC (satisfies the claimed TPS data *including* two information bits, where the term *including* is open-ended) provides information on PHY mode (modulation, FEC) and the TDM portion transitions (column 11, lines 54-62) in the downlink map 123 of Fig. 9, and whether the signal has a forward error correction framing structure (The DIUC provides information on PHY mode (modulation, FEC), column 11, lines 50-56)

Stanwood et al. do not expressly disclose: and including the transmission parameter signaling data on a lower level of the signal than a level of the signal on which service information is transmitted.

In the field of implementing transmission protocol, Mecklenbraucker et al. disclose: the transmission parameter signaling data on a lower level than a level on which service information (interpreted to correspond to data) is included (Fig. 2, column 4, lines 51-61 Layer 1 which includes descriptions of the bit transmissions (is a transmission parameter signaling layer) and Layer 2 is the data link layer).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the system of Stanwood et al. based on Mecklenbraucker et al. to use a layer model commonly used and suitable for radio communications (Mecklenbraucker et al. , column 4, lines 51-61).

Apparatus claim 17 is rejected based on a rationale similar to the one used to reject method claim 13 above.

#### ***Allowable Subject Matter***

6. Claim 25 is allowed over the prior art of the record for the reasons indicated in the 1/03/2010 Office Action.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2611

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SOPHIA VLAHOS whose telephone number is (571)272-5507. The examiner can normally be reached on MTWRF 8:30-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SOPHIA VLAHOS/  
Examiner, Art Unit 2611



Application/Control Number: 10/551,122  
Art Unit: 2611

Page 10

/CHIEH M FAN/

Supervisory Patent Examiner, Art Unit 2611